EXHIBIT 41

J. Kretchmar Research Compendium (2009 Literature Review) (UNC0079519-31)

Summary

- In its 2003 landmark decision, *Grutter v. Bollinger*, the Supreme Court upheld the use of race as a plus factor in admissions decisions. But the Court also communicated two important stipulations - that universities make "serious, good faith" efforts to consider race-neutral alternatives, and that universities work toward the eventual elimination of racial preferences.

- Immediately prior to and immediately following the Supreme Court Decision, the US Department of Education, under the leadership of George W. Bush, published two reports describing race-neutral alternatives. The alternatives described fall into two broad categories – developmental approaches aimed at better preparing students (particularly those from traditionally low performing schools) for postsecondary education, and admissions approaches (e.g. class-rank plans, socioeconomic preferences, etc) designed to achieve diverse and qualified student bodies without considering race. The US Department of Education suggested the early results of such programs were "promising" but that their ultimate effectiveness could not yet be determined.

- California, Texas, Florida, and Washington have all passed state regulations banning affirmative action in college admissions. The various plans they've implemented in place of affirmative action (e.g. The Texas Top 10 percent plan, The Florida 20 percent plan) have served as "natural experiments." A number of studies have looked at the impact of class-rank plans on the representation of underrepresented minorities, the applicant behavior of minority and non-minority students, and the academic qualifications and performance of enrolling students.

- In general, most research suggests that race-neutral alternatives, and class-rank plans in particular, have been ineffective in reproducing the same level of diversity as the practice of affirmative action. Race-neutral admissions models that do establish significant levels of diversity often compromise academic quality.

- Aside from class-rank plans, admissions policies granting socioeconomic (as opposed to racial) preferences have received the most attention. Such plans, advocates argue, are more in line with popular conceptions of merit as achievement in the context of obstacles overcome. Most of the discussion surrounding socioeconomic plans has been theoretical, though some researchers have performed model simulations that demonstrate such policies would significantly improve socioeconomic diversity while minimally compromising racial diversity.

- Many studies have investigated the impact of affirmative action bans on the application behavior of minority and non-minority applicants. Most research has documented a decline in minority applicants and applicants from traditionally low performing schools at flagship universities after the ban of affirmative action; affirmative action, they argue, served as an "institutional welcome" that counterbalanced a natural reluctance to apply. Others, however, found conflicting evidence, claiming that the Texas Top 10 percent plan has created a more geographically diverse applicant pool, with a greater share of students from rural and poor schools, and a decreasing share from traditional feeder high schools. [Note: I'm really not sure how to reconcile these conflicting findings. In some cases, the same author wrote two papers with conflicting results. Not sure if there is one variable that changed, but I haven't been able to figure it out].

- Most universities value both diversity and academic preparedness. Several researchers have modeled the impact of race-neutral models on academic quality, and conclude that eliminating affirmative action results in less academically able student bodies. Others have shown that students admitted under class rank plans – who would not otherwise have been academically competitive – have lower GPAs and graduation rates than their peers. By contrast, little evidence has been found to support the so-called mismatch hypothesis – the notion that students admitted under affirmative action policies are academically unqualified. Finally, others have demonstrated that the quality of high school a student attends, not her race, significantly impacts her future college success.

Supreme Court Decision

In June 2003, the Supreme Court addressed the use of race in public higher education for the first time in over 25 years. In *Grutter v. Bollinger*, Justice O'Connor delivered the opinion of the court, concluding that "student body diversity is a compelling state interest that can justify the use of race in university admissions." The Court legalized the use of race as a *plus factor* in an applicant's admission file, so long as race was considered alongside other factors that might contribute to student body diversity (e.g. fluency in multiple languages, personal adversity and family hardship, work experience).

Proponents of affirmative action argue that using race as a plus factor in admissions decisions violates the principle of narrow tailoring; that is, the means chosen to further the goal of student body diversity are not specifically and narrowly framed to meet that goal because race-neutral alternatives exist. The Court, however, disagreed. O'Connor writes, "Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative. Narrow tailoring does, however, require serious, good faith consideration of workable race-neutral alternatives that will achieve the diversity the university seeks." Accordingly, the Court acknowledged that race-conscious admissions policies must not continue indefinitely because "enshrining a permanent justification for racial preferences would offend [the] fundamental equal protection principle." The Court advised universities to conduct periodic reviews to determine whether race-conscious policies are still necessary to achieve student body diversity, and to pay attention to "experiments" being conducted in states such as California, Texas, Florida, and Washington. O'Connor ended by arguing that racial preferences should no longer be necessary in 25 years.

Race-Neutral Approaches Proposed by US Department of Education

In advance of the Supreme Court decision handed down in *Grutter v. Bollinger*, the Department of Education – under the leadership of George W. Bush – published a report in March 2003 titled 'Race-Neutral Alternatives in Postsecondary Education: Innovative Approaches to Diversity.' Citing the educational benefits of diversity, and "strong legal and policy trends" away from the use of racial preferences, the administration hoped the report would foster "innovative thinking" about race-neutral alternatives. Importantly, however, the purpose of the report was merely to *describe* race-neutral alternatives then being used at institutions across the country; it was not intended to assess the programs or serve as a "best practices" guide. The authors of the report claimed the effectiveness of the programs could not be known until the programs were implemented over time, and in more diverse educational contexts.

Before summarizing the race-neutral programs introduced in the report, it is important to recognize that not all audiences were receptive to its recommendations, or as willing to suspend judgment regarding their effectiveness. Members of the Civil Rights Project, then housed at Harvard University, "found little

merit in the content of the report, or the quality of its research. The Education Department's work amounts to 'unsubstantiated hopeful expressions' that gloss over the failures of race-neutral efforts to increase diversity" (Cavanagh, 2003, *Chronicle of Higher Education*). A senior research associate affiliated with the Civil Rights project remarked that the report "isn't helpful, because it doesn't give all the information that's out there about these programs. Some of the information they provide is deeply misleading" (Cavanagh, 2003, *Chronicle of Higher Education*). More recent research too – described later - sheds new light on the conclusions drawn by the Department of Education in 2003.

The Department of Education's March 2003 report, and a second that they produced in February 2004, categorize race-neutral alternatives as either developmental approaches or admissions approaches. While most public attention is given to admissions plans, they argue, "another large category of race-neutral efforts must also be considered – policies designed to develop the skills, resources, and abilities…of our nation's students, particularly those who attend traditionally low performing schools, to such an extent that the admissions process will naturally produce a diverse student body" (p. 10). Such programs aim to build skills in students who would not otherwise be competitive in the admissions process, and then to provide the necessary support in the postsecondary educational environment to allow these students to succeed. A brief summary of the *developmental* approaches described in the March 2003 and February 2004 reports include:

- Expansion of Advanced Placement Courses. At the university, state, and federal level, initiatives have been introduced with the purpose of diversifying the range of students taking college-level courses before they graduate from high school. Programs offer teacher and school level incentives (e.g. teacher bonuses for every student who scores above a 3) and target minority students and students attending traditionally low-performing high schools.

- Partnerships between colleges and low-performing high schools. The report provides examples of partnerships in California, Pennsylvania, Vermont, and Florida. Some are student-centered partnerships (e.g. universities providing tutoring and mentoring to K-12 students), while others are institution level-partnerships (e.g. The University of Vermont works directly with one specific high school, the Christopher Columbus High School in Bronx, New York to attract students to college).

- Partnerships between the College Board and educational institutions. The state of Florida, in conjunction with the College Board, offers the PSAT to all students in Florida at no cost; the Board has also provided test preparation courses, college planning and readiness materials, and teacher workshops in low-performing schools throughout the state.

- Expansion of financial aid programs. Some universities are expanding financial aid to students from historically underrepresented high schools, in an effort to diversify their pool of applicants.

- Recruitment and Outreach. Admissions offices are expanding recruitment programs to traditionally underserved communities; non-profits such as College Summit work directly with low-income students to encourage their pursuit of postsecondary education; the federal government supports several programs – GEAR UP, Upward Bound, etc – designed to prepare students from disadvantaged backgrounds for success in college.

In the last decade or more, changes in state-level affirmative action policies – mainly, the elimination of affirmative action in postsecondary admissions – have created "natural experiments" in several pockets across

the country. These experiments represent what the US Department of Education referred to as race-neutral admissions plans. These plans fall into two broad categories – those based on socioeconomic factors, and those based primarily on class rank. The report provides brief descriptions of each:

- Socioeconomic admissions plans: Some educational institutions are replacing preferences based on race with preferences based on an applicant's socioeconomic status. Socioeconomic status involves three key factors: parents' education, family income, and parents' occupation. While such plans may benefit minority students, advocates argue that "most glaring opportunity gaps in our educational system" are between low-income and middle-upper class families. The report describes examples of admissions plans based on socioeconomic factors in the Texas, California, and Florida university systems.

- Class-Rank admission plans: 1) In response to the 1996 state ruling that eliminated the use of race as factor in admissions decisions (*Hopwood v. State of Texas*), the state implemented the Texas Top 10 Percent plan, guaranteeing admission to top 10% graduates of every state accredited public or private high school into the University of Texas campus of choice. 2) In Florida, all public high school students who graduate in top 20% of their class are admitted to the state university system. They must compete, however, for a spot at their school of choice. 3) In California, voter-approved Proposition 209 eliminated race-preferential programs in 1996; in response, the state system implemented a multi-level admissions process. Students are eligible for admission to the system through several avenues, one of which is by graduating in the top 4% of their high school class. Each UC campus then evaluates students admitted to the system to determine admission to that particular campus.

Even though the US Department of Education acknowledged that "conclusive data on the effects" of race-neutral programs was not yet available, they described early results as "promising." The final six pages of the 2003 report outline what they view as positive preliminary findings of the socioeconomic and class-rank admissions plans. In Texas and California, for example, more students attending traditionally underrepresented high schools – particularly low-performing urban and rural high schools - gained admission to the university system than ever before. The report also suggests positive outcomes in terms of racial diversity; in Texas, according to the report, the Top 10 Percent Plan restored racial diversity across the university system to pre-*Hopwood* levels and in Florida, minority representation as a whole remained steady (even though representation *within* different minority groups fluctuated). And although UC Berkeley experienced significant and substantial declines in minority enrollment, representation at other universities in the California state system improved. The report concludes with the concession that "any race-neutral program is unlikely to produce racial diversity with the precision that using race will;" but 'signs' suggest "minority participation will improve over time" (p. 39).

Results of Race-Neutral Admission Plans

It has been over ten years since most of these 'natural experiments' were first begun. The benefit of time, and more extensive research, has provided a more fully informed, even if not entirely conclusive, answer to the question of whether race-neutral admissions plans – and class-rank policies in particular – produce diverse student bodies. The question has been studied from a multitude of angles – looking at the impact such policies have on the application behavior of students, investigating the academic performance of students

admitted under class-rank plans (who otherwise would not have been competitive), and statistical modeling of the impact various admissions policies have on minority representation at flagship public institutions.

Impact on Representation:

Long and Tienda (2008) examined the racial/ethnic composition of three Texas universities – UT-Austin, Texas A&M, and Texas Tech – following the ban on affirmative action in 1996. First, however, the authors examined the advantage given to underrepresented minorities pre-*Hopwood*. The advantage, they concluded, was significant, amounting to a likelihood of admission for Black and Hispanic applicants that was 13 to 14 percentage points higher than for comparable White applicants. Despite efforts by both universities, post *Hopwood*, to shift the weight of admissions decisions toward characteristics that would favor underrepresented minorities, they did so unsuccessfully. At UT-Austin, for example, the net effect of *Hopwood* and the top 10% law was to lower the share of Black and Hispanic admitted students from nearly 20% to 17.7%. Similar changes occurred at Texas A&M. Long and Tienda (2008) concluded that "minority applicants were the net 'losers' of the changing admission regimes while Whites continued to maintain their admission advantage. The outcome is all the more remarkable," they observed, "in a state where Black and Hispanic students are rapidly moving toward being the majority of high school graduates" (p. 270). These findings confirm what Tienda et. al (2003) found five years earlier, though the authors still advised against generalizing these results to other states given differences in the racial composition of the college-age population, segregation of high schools, and number of public postsecondary institutions.

Chapa and Horn (2007), however, writing just a year earlier, came to more hopeful conclusions. Looking at the pool of *admitted* students specifically (rather than enrolling students), and looking at public schools statewide (rather than flagship institutions), the authors document that the share of White students fell between 1998 and 2004 from 66 to 58%; black representation remained constant at 7%, while Hispanic representation increased from 18 to 22%. Data also show that students admitted under the Top 10 percent law are outperforming other students; they have better grades, on average, and greater retention/graduation rates than students who were not granted automatic admission under the plan (even similarly credentialed ones). The authors note, however, that results are not necessarily a direct result of the Top 10 percent law; universities also ramped up outreach efforts, and increased need-based financial aid.

Koretz, et. al. (2002) used data from the California state system to model the impact of various admissions policies on the diversity of student bodies at selective, moderately selective, and less selective universities within the state. Using only HSGPA and SAT data (from 1995-1998), and categorizing matriculation as a series of steps – taking the SAT, establishing UC system eligibility, applying to specific UC system campus, and gaining admission to a UC system campus – Koretz, et. al (2002) were able to model the potential impact of each step on the diversity of the student body in the absence of affirmative action. At highly selective universities like UCLA and Berkeley, for example, diversity was impacted by each of the following: underrepresentation of Hispanic students in the SAT-test taking population; the disproportionate number of Black students impacted by UC eligibility criteria; and a race-neutral admissions policy that further reduced Black and Hispanic representation.

Koretz et. al. (2002) also modeled the impact of various X% plans on the diversity and academic qualifications of students admitted to the UC system. The four models considered were: 1) admitting the top 12.5% of all students *statewide* (the baseline condition); 2) admitting the top 12.5% of students *at each school*; 3) admitting the top 6% at each school, and the top 6.5% statewide; and 4) admitting the top 4% at each school, and the top 8.5% statewide. The third and fourth models, they concluded, had little impact on the average

SAT score or the proportion of underrepresented students in the admitted pool. Admitting the top 12.5% at each school had the largest positive impact on diversity – nearly doubling the representation of both Black and Hispanic students – but also the largest negative impact on academic qualifications, with an average drop in SAT of over 100 points for underrepresented minorities. Admitting the top 12.5% at each school also increased representation of first-generation college students, students from urban schools, and bi-lingual students. Finally, the authors also modeled the impact of admissions policies that preference demographic factors other than race, such as school type, mother's education, income, etc. Ultimately, "none of the alternative admission models analyzed could replicate the composition of the student population that was in place before the termination of affirmative action in California" (p. 27).

Epenshade and Chung (2005) examined how preferences for different types of students – athletes, legacies, underrepresented minorities – impacted the composition of admitted students at three *private*, elite, research institutions. According to their model, eliminating affirmative action would reduce acceptance rates for African Americans from 33.7% to 12.2%, while the proportion of African American students in the admitted group would drop from 9.0 to 3.3%. The change in policy would impact Hispanic students similarly; their acceptance rate would be cut in half (from 26.8% to 12.9%), while their representation in the admitted pool would fall from 7.9% to 3.8%. The authors also looked at who would benefit most from the elimination of affirmative action, and concluded that 4 out of 5 spaces *not taken* by African American and Hispanic students would be filled by Asian students. By contrast, Epenshade and Chung (2005) found that athlete and legacy preferences have minimal impact on the diversity of the admitted pool: "preferences for athletes and legacies do little to displace minority applicants largely because athletes and legacies make up a small share of all applicants to highly selective universities" (p. 304).

Although class-rank plans are by far the most widely used race-neutral alternative, some institutions have combined class-rank plans with consideration of other factors like geography. As Rendon, Novack, and Dowell (2005) report, The University of California-Long Beach was recently faced with competing objectives – to reduce enrollment while maintaining and/or increasing diversity using race-neutral admissions policies. In Fall 2002, the university adopted a new admissions policy favoring students in the local service area who also met the statewide eligibility index for moderately selective state schools. The eligibility criteria were increased for students who lived farther away from the local service area. Because even the lesser stringent criteria were known to disproportionately impact African American and Latino students, university officials were not surprised when the diversity of the enrolling class was compromised. The school was able to shrink enrollment by 32.8%, but African American enrollment declined by 52.3%, while Latino representation fell 39.7%. The following year, the university altered its geographic boundaries, extending the local service area to include several more schools, thereby increasing the number of students eligible for admission under the less stringent standards. Because the new service areas were ethnically diverse, the university was able to meet its diversity goals. The authors noted that although geographic preference models worked in Southern California, they would not necessarily work for universities in less diverse parts of the country.

Although UC-Long Beach was able to use geographic preferences to create a diverse student body, socioeconomic preferences have received the most attention in the research literature as a viable race-neutral alternative. Kahlenberg (2003), writing on behalf of The Century Foundation and using data from 146 of the nation's top colleges, concluded that economic affirmative action provides the best way to meet a number of different goals. Basing many of his conclusions on the work of Carnevale and Rose (2003), Kahlenberg (2003) argues that economic affirmative action is a better approximation of merit (e.g. the notion of academic achievement taken in context of obstacles overcome) than race-based affirmative action; achieves *nearly* as

much racial diversity yet much greater economic diversity (e.g. students in the bottom half economically would comprise 38% of students at elite colleges, as opposed to 10% under current models); and results in the same graduation rates. Kahlenberg (2003) concludes that economic affirmative action, unlike racial affirmative action and percentage plans, is the only model that addresses "the fundamental root source of inequality: the division between the haves and the have nots" (p. 4).

More specifically, Carnevale and Rose's (2003) study examines the impact of five different types of admissions models – a race-neutral model based on test scores and grades; a lottery system; class-rank preferences without a minimum test score; class-rank preferences with a minimum test score; and a model based on economic preferences – and places each in the context of the population currently attending elite institutions (of which the least-represented group, they argue, are low SES students). Using data from the top 146 colleges and universities, the authors find that a race-neutral model based on academic merit would reduce representation of underrepresented minorities (the only model of the five to do so), a class-rank model without a minimum SAT score would increase racial and economic diversity, but puts some students at risk academically, a class-rank model with a minimum SAT would have a negative impact on racial and economic diversity but a positive impact on graduation rates, while a model based on economic status would compromise racial diversity only slight, improve economic diversity substantially, and maintain student performance. Carnevale and Rose's (2003) conclusion, however, differs slightly from Kahlenberg's (2003). Economic affirmative action, they recognize, is not a substitute for race-based affirmative action. "Income-based policies are not an effective substitute for conscious racial and ethnic enrollment targets, unless low-income African American and Hispanics can be chosen disproportionately from the qualified pool of low socioeconomic status students…" (p. 153).

St. John, Simmons, and Musoba (2002) build upon the publicly accepted notion of merit as academic achievement in the context of obstacles overcome. Merit, they argue, "is not simply where you wind up, but what you did with what you were given" (p. 37). Using this as their theoretical foundation, they built a merit index that accounts for the quality of school attended by each individual student. They calculate a simple index by subtracting the average SAT score of an applicant's high school from the applicant's own score, and a more complex index by assigning higher weights to schools with disproportionately poor performance. According to their analysis, using data from two universities, the simple merit index increased diversity in the applicant pool, while the more complex index predicted persistence as well as the SAT. They conclude that although "the merit-aware approach can provide a fair and just way to screen admissions applicants, it is not a substitute for affirmative action" (p. 44)

Impact on Applicant Behavior:

Harris and Tienda (2009) investigated an often overlooked component of race-neutral admission policies – their impact on the application rates of minority and non-minority high school graduates. "Despite their centrality in shaping the composition of entering classes, with few exceptions application rates have been relatively ignored as a focus of inquiry. Partly this reflects data constraints and partly the fact that litigation targets criteria used in institutional admissions decisions, not individual decision to apply…or enroll" (p. 2). Building on the findings of Koffman and Tienda (2008), who reported that the top 10% law did little to raise the application rates at public flagships of students from poor high schools, Harris and Tienda (2009) investigated application rates by ethnicity. Using ten years worth of data (1993-2003) from public high schools in Texas, the authors found that Hispanic and black application rates to the Texas flagship universities fell after affirmative action was banned, and that there disadvantage has grown over time. "This

result," they conclude, "has profound policy implications that transcend admission regimes because they redirect attention away from the seemingly irresolvable differences about race or class rank preferences to encouraging greater numbers of qualified applications to apply" (p. 20). They identify the cultivation of a college-going culture at under-resourced high schools, coupled with financial aid, as a short-term, low cost strategy for improving diversity.

Five years earlier, Long (2004) found a similar impact on the application behavior of underrepresented minorities in both Texas and California. The changes, he discovered, widened an already existing gap between the number of SAT score reports sent to in-state public colleges, particularly in California, by minority and non-minority students. In addition, Long (2004) discovered that minority students began sending SAT scores to lower quality colleges post-affirmative action, while White and Asian American students began doing the opposite. This indirect effect of the elimination of race-based preferences, he argued, could be more detrimental than the direct impact caused by the policy change itself. Like Harris and Tienda (2009), Long (2004) argues that "college administrators and policymakers should focus their attention on efforts to boost minority applications. Such a strategy could ultimately be the most effective method to maintain minority enrollments after the elimination of affirmative action" (p. 341).

Similarly, Niu, Tienda, and Cortes (2006) document disparate educational aspirations of minority and non-minority students in Texas, within the context of the Top 10 percent law. Using data from 2002, they found that high school seniors from low-income schools, compared to their affluent counterparts, were less likely to choose selective institutions as their first choice school. In addition, Black and Hispanic students were less likely than white students to choose selective institutions, as either their first preference when planning for college, or when choosing to enroll. Within top decile students, however, minority group status and high school type did not impact enrollment; students from affluent and low-income schools, for example, were equally as likely to choose selective institutions. What these results concealed, however, were differences in application rates of students by high school type; even top-decile students from low-income schools and/or underrepresented minority groups were much less likely to actually seek admission than other top-decile students.

Like underrepresented minority students in Texas and California, underrepresented minority students in Washington reacted similarly to affirmative action bans in their state. Brown and Hirschman (2006) discovered that representation of minority students at the flagship university – University of Washington – fell from 8.2% of the first-year class to 5.7% of the first-year class following the passage of I-200 (the law banning affirmative action). While admission rates declined the first year of the ban – from 84 to 70% for African American students - the authors concluded that the drop in applications explained the decline in minority student representation more than the change in admission rates due to the ban. By 2003, the application rates of minority students in Washington had largely rebounded to pre I-200 levels; nevertheless, the gap in application rates between minority and non-minority students persists, and the authors concluded that even a modest gain in the proportion of minority applicants who apply would have significant impact on the composition of the first-year class. They conclude that affirmative action policies signal an "institutional welcoming environment" that "serves as a counterweight to the normal reluctance of prospective students to apply to institutions that may be perceived as intimidating" (p. 106).

Others, however, have found little change in the application behavior of underrepresented minority students in the face of affirmative action bans. Card and Kreuger (2004) used SAT-sending patterns as a proxy for applying to an institution, and found little difference in the rates of application for Hispanic and Black

students pre and post affirmative action in California or Texas. Their sample, however, was limited to *highly-qualified* underrepresented minority students. "A particular concern," they write, "is that highly qualified minorities – who were not directly affected by the policy change – would be dissuaded from applying to elite public schools, either because of the decline in campus diversity or because of uncertainty about their admission prospects" (abstract). They found no evidence to support the concern.

More conflicting evidence comes from Long, Saenz, and Tienda (2009), who like Koffman and Tienda (2008), investigated the application behavior of students in Texas *by high school*. Koffman and Tienda (2008) concluded that students from affluent high schools are more likely to seek admission to public flagships compared to graduates of schools serving students of low to moderate socioeconomic means, even after the implementation of the Top 10 percent law. In the end, they found that the admission guarantee did little to raise flagship application rates from poor high schools. Long, Saenz, and Tienda (2009), however, contend that the applicant pool at Texas flagships has become more geographically diverse in the post-*Hopwood* era; a smaller share of students come from traditional feeder schools, while applicants from students attending rural and high-poverty schools has increased. "After 1998, the overrepresentation of students from low-poverty high schools began a downward trend, as the share of UT enrollment from the highest poverty high schools inched upward. Most impressive is the growing representation of students from schools where 40 to 60% of students receive free or reduced lunches" (p. 15). Long, Saenz, and Tienda (2009) believe the transparency of new admissions policies – possibly even more than the "institutional welcoming environment" attributed to affirmative action – encourages traditionally underrepresented students to apply.

Impact on Student Quality/Academic Performance:

Chan and Eyster (2003) modeled the impact of race-neutral alternatives on student quality, recognizing that most universities value both academic preparedness as well as diversity. In both theory and practice, they argue, the elimination of affirmative action leads universities to adopt admissions policies that partially ignore student qualifications, resulting in a less academically able student body. "For any admissions rule that partially ignores qualifications, there exists an affirmative action rule that yields the same diversity and strictly higher student quality. In fact, affirmative action maximizes total student quality for any level of diversity" (p. 859). Furthermore, the authors argued that using socioeconomic status as a proxy for race would reduce quality *and* diversity; since class is negatively correlated with academic performance across all ethnic groups, a policy favoring all low-income students would reduce quality. Because very few academically qualified low-income students are minorities, a policy admitting only qualified low-income students would compromise diversity.

Furstenburg (2009) examined the academic performance of students admitted as a result of class-rank policies, who would not have been competitive otherwise. Whereas little evidence has been found to support the mismatch hypothesis – the notion that students admitted under affirmative action are academically unqualified – Furstenburg (2009) demonstrated that students admitted under race-neutral policies in Texas had lower first and sixth-semester GPAs, and lower probability of graduation. The effect was strongest for White and Hispanic students. He concluded, "To the extent that administrators at selective institutions want to maintain their academic standards, policy makers should reconsider policies such as Top Ten Percent Law. Admissions policies without guarantees and admissions decisions based on individual evaluations of applicants qualifications are likely to avoid this problem" (p. 17). [Note: Furstenburg's (2009) findings seem to contradict those of Chapa and Horn (2007), though he focused on a subpopulation of students – those not

likely to be admitted otherwise – while Chapa and Horn (2007) included all students admitted under the Top 10 percent plan].

Fletcher and Tienda (2009) approach the question of academic performance and affirmative action from a different angle, investigating the relationship between the quality of the high school a student attends and his/her college success. The persistence of an achievement gap between minority and non-minority students has puzzled scholars for quite some time; "despite voluminous social science literatures that document and evaluate the dimensions and evolution of academic achievement gaps," the authors write, "they remain poorly understood" (p. 1). In this study, Fletcher and Tienda (2009) replicate previous research, reducing – but not eliminating -the achievement gap between minority and non-minority students by controlling for test scores and class rank. When they take into account differences across high schools, however, gaps between black-white and Hispanic-white students in several college outcomes are eliminated or reversed, regardless of institutional selectivity. The authors claim their study illustrates "how high school quality foments race and ethnic inequality in college performance" (p. 1).

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